## Horses and Stocks

*Further below is an excerpt from Bet with the Best: Expert Strategies from America's Leading Handicappers.[i] We recommend reading the section from Chapter 3, by Steven Crist.  The read-across to stock-picking is tremendous.  I have highlighted my ten favourite passages below, paraphrasing slightly, and substituting stock-related terms for any horse-related terms.*

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1.  The point of this exercise is to illustrate that even a company with a very high likelihood of winning can be either a very good or a very bad stock

2.  Now ask yourself honestly: Do you really think this way when you're investing? Or do you find companies you "like" and hope for the best on price?

3.  This is the way we all have been conditioned to think: Find the winner, then invest.

4.  The purpose here is to focus on profit rather than prediction; to make money instead of just picking winners.

5.  The issue is not which company in the race is the most likely winner, but which stock or stocks offering odds that exceed their actual chances of victory.

6.  The stock-picker who wants to show a profit must adopt a cold-blooded and unsentimental approach to the game that is at variance with both the "sporting" impulse to be loyal to your favorite investments and the egotistical impulse to stick with your initial selection at any price. This approach (ignoring highly probable winners with poor payoffs) requires the confidence and Zen-like temperament to endure watching victories (by others) at unacceptably high share prices by such companies.

7.  Your opportunity for profit in the stock-market consists entirely of mistakes that your competition makes in assessing each stock's probability of winning.

8.  As long as the volume of ill-informed money is substantial, there can be a positive expectation for the true sharpshooter who waits for the competition to make mistakes.

9.  There is no shame in passing on a stock because you just don't see any value in it.

10. The only path to consistent profit is to exploit the discrepancy between the true likelihood of an outcome and the odds being offered.

**Bet With The Best, Chapter 3:  Crist on Value**

A typical liberal-arts education sets a graduate loose upon the world with a tremendous amount of knowledge he will never need or use again and some gaping holes about how actually to function in society. He may know the abbreviations for the periodic table of elements and the names of the leading Renaissance poets, but have no idea how to make a cup of coffee or write a business letter.

A similar situation exists for the American horseplayer, self-taught through handicapping literature and days of hard knocks at the old horse park. He has vast amounts of handicapping data swimming through his head – names, dates, running lines, speed figures, pedigrees, trainer patterns and angles – all devoted to the goal of discovering the likeliest winners of horse races. When it comes time to go to the betting windows, however, nearly every one of these well-informed enthusiasts almost immediately surrenders his edge. He is like the chemistry scholar who knows the molecular structure of the coffee bean but has no idea how much water to put into the percolator. Each is unable to convert his knowledge into something useful and pleasurable; a steaming cup of java, or a consistent profit on racetrack bets.

This is not to suggest that universities should stop teaching chemistry or literature, or that horseplayers should not continue to develop and enhance their skills as selectors. Like a liberal-arts education, the study of horses and how they perform is a worthy pleasure in itself, and in the case of handicapping, the world's savviest bettor cannot win with bad opinions. The point is that ==pure handicapping is only the first half of the battle in winning at the races==.

Most horseplayers intuitively know this, but don't do much about it except complain. How often have you or a fellow track-goer opined that you're a pretty good handicapper but you really need to work on your betting strategies or your so-called money management? This is sometimes an exercise in denial for people who are in fact bad handicappers, but it is probably true for many who can select winners as well as anyone. The problem with this line of thinking is that it suggests betting is some small component of the game, which is like pretending that putting is a minor part of championship golf. In fact, ==if you handicap well and bet poorly, you've failed. It's as useless as crushing your tee shots while three-putting every green==.

Turning your enthusiasm for racing and proficiency at handicapping into profitable betting requires an entirely new way of thinking about playing the races. It would take a far longer treatise than this chapter to explore fully the mathematics and mechanics of racetrack betting, and the strategies available to optimize one's wagering through different types of bets. Instead, the purpose here is to raise three fundamental concepts that may help the serious handicapper to focus on profit rather than prediction, ==making money instead of just picking winners==: probability and odds; handicapping the competition; and using multiple bets to improve your prices.



*Don't pick who you think will win, pick who has the highest expected return.*

**Probability and Odds**

Forget for a moment everything you know about parimutuel betting and pretend that horse racing is set up like sports betting or a game of blackjack: If you pick the winning horse, the track doubles your bet. Every winner, regardless of how many people bet on him, pays $4.

Now ask yourself two questions:

1. Do you want to play?
2. How would you handicap and bet differently from the way you do now?

Most horseplayers will realize after a moment of thought that the correct answer to the first question is yes. It might not be a great deal of fun, but you could sit around and wait for mismatches, races in which one horse is so clearly superior to the competition that anyone could fairly agree that he has a better than 50 percent chance of winning the race. You would never bet a horse you honestly believed had less than a 50 percent chance of winning.

If you could find 50 races in which you discovered a horse with a legitimate 70 percent chance of winning, you would invest $100 – 50 $2 bets – and get a $4 payoff on 35 of those 50 races for a return of $140. A $140 return on a $100 investment is a 40 percent profit, and you could quit your day job and spend the rest of your life refining your criteria for horses with a 70 percent chance of winning.

Racing unfortunately does not work this way. Horses that everyone perceives as having a 70 percent chance of winning pay substantially less than $4 because the odds are determined by the amount of money actually bet on each horse, and because track takeout and breakage further depress the payout.

It's worth examining the mechanics of this situation. Let's look at a $1,000 win pool on a hypothetical four-horse race in which every contestant attracts an amount of betting that accurately reflects his chance of winning:

| Horse | Winning chance | $ Bet |
|-------|---------------|-------|
| A | 50% | $500 |
| B | 30% | $300 |
| C | 15% | $150 |
| D | 5% | $ 50 |

Now, what will these horses actually pay to win? Based on the percentages, most horseplayers would guess about 1-1 ($4), 5-2 ($7), 6-1 ($14), and 20-1 ($42). In fact, the payouts are significantly lower.

Let's say this race is being run in Kentucky, with a 16 percent takeout and breakage that rounds payoffs down to the nearest 20-cent increment. That leaves only $840 of the original $1,000 pool to split up among the winning ticket-holders. (The other $160 goes to pay the race purses, maintain the track, and fatten the coffers of the Bluegrass State.) So Horse A does not pay $4, but $3.36, which is rounded down to $3.20. Horse B does not pay $7, but $5.60. Horse C returns $11.20 instead of $14, and the longshot returns $33.60 instead of $42.

In each of these cases, the actual return is lower than what is required to break even, much less show a profit, over time. If you bet horses who win 50 percent of the time and pay $3.20, you will lose 20 percent of your investment.

The point of this exercise is to illustrate that even a horse with a very high likelihood of winning can be either a very good or a very bad bet, and the difference between the two is determined by only one thing: the odds. A horseplayer cannot remind himself of this simple truth too often, and it can be reduced to the following equation:

**Value = Probability x Price**

This equation applies to every type of horse and bet you will ever make. A horse with a 50 percent probability of victory is a good bet at better than even money (also known as an overlay) and a bad bet at less (a.k.a. an underlay). A 10-1 shot to whom you take a fancy is a wonderful overlay if he has a 15 percent chance of victory and a horrendous underlay if his true chance is only 5 percent. There are winning $50 exacta payoffs that are generous gifts and $50 exacta payouts where you made a terrible bet.

Now ask yourself honestly: Do you really think this way when you're handicapping? Or do you find horses you "like" and hope for the best on price? Most honest players will admit they follow the latter path.

This is the way we all have been conditioned to think: Find the winner, then bet. Know your horses and the money will take care of itself. Stare at the past performances long enough and the winner will jump off the page. The problem is that we're asking the wrong question. The issue is not which horse in the race is the most likely winner, but which horse or horses are offering odds that exceed their actual chances of victory.

This may sound elementary, and many players may think they are following this principle, but few actually do. Under this mindset, everything but the odds fades from view. There is no such thing as "liking" a horse to win a race, only an attractive discrepancy between his chances and his price. It is not enough to lose enthusiasm when the horse you liked is odds-on or to get excited if his price drifts up. You must have a clear sense of what price every horse should be, and be prepared to discard your plans and seize new opportunities depending solely on the tote board.

If you begin espousing this approach, you are sure to suffer abuse from your fellow horseplayers. When one of them asks you who you like in a race and you say, "I think the 4 is a bigger price than he should be," the likely response is, "So what? Who do you like?" Your cronies are apt to tell you that you should be betting on horses, not on prices, and after an inevitable stretch of watching some of their underlays win, you will begin to doubt yourself. Sticking to your guns is easier said than done, but it is the only way to win in the long run. The horseplayer who wants to show a profit must adopt a cold-blooded and unsentimental approach to the game that is at variance with both the "sporting" impulse to be loyal to your favorite horses and the egotistical impulse to stick with your initial selection at any price. This approach requires the confidence and Zen-like temperament to endure watching victories at unacceptably low prices by such horses.

Two prominent races run during the spring of 2001 illustrate the principle of seeking overlays and being flexible in your approach.

My handicapping of the 2001 Kentucky Derby led me to the opinion that the race was most likely to be won by one of the three quality closers in the field of 17 – Point Given, Dollar Bill, or Monarchos. I allotted only a combined 45 percent chance to the other 14 horses in the race and split up the 55 percent likelihood of victory by my three choices at 25 percent for Point Given and 15 percent each for Dollar Bill and Monarchos.



*If I like the jockey with the prettiest vest, you win.*

I now faced two totally unrelated decisions: Whom to "pick" in Daily Racing Form as my selections for the race, and then which horse to back on Derby Day. If the Derby were being run at Utopia Downs and each of the 17 entrants were paying off at odds of 16-1, I would simply have picked the likeliest winner, which to my mind was Point Given. However, at probable odds of 2-1, I would be recommending a fundamentally bad bet – tripling your money on a horse with a 25 percent chance of victory only gets you to 75 percent, or a 25 percent loss. So I knew I would have to pick one of my other two, both of whom figured to be at least the 5-1 needed to make them square bets. With Monarchos listed at 6-1 and Dollar Bill at 10-1 on the early lines, I selected the superior value and picked the race Dollar Bill-Monarchos-Point Given.

By post time two days later, however, I invoked the handicapper's prerogative of changing his mind when it comes time to wager. The following table shows the probability I had allotted to each starter, the odds necessary to receive fair value, and the actual odds at post time:

| Horse | Probability | Required Odds | Actual Odds |
|---|---|---|---|
| Point Given | 25% | 3-1 | 9-5 |
| Dollar Bill | 15% | 6-1 | 6-1 |
| Monarchos | 15% | 6-1 | 10-1 |
| Millennium Wind | 8% | 12-1 | 9-1 |
| Congaree | 8% | 12-1 | 7-1 |
| Balto Star | 4% | 24-1 | 8-1 |
| Fifty Stars | 4% | 24-1 | 40-1 |
| Jamaican Rum | 4% | 24-1 | 20-1 |
| A P Valentine | 4% | 24-1 | 19-1 |
| Thunder Blitz | 4% | 24-1 | 25-1 |
| Express Tour | 4% | 24-1 | 18-1 |
| Each of 6 others | <1% | >100-1 | 35-1 to 102-1 |

Point Given was still the likeliest winner in my mind, but 9-5 was still an unacceptable return for a horse with a 25% chance of victory. To nearly everyone's surprise, Dollar Bill had been bet down to 6-1 and Monarchos had floated to 10-1. Dollar Bill now offered no real value relative to my assessment of his actual chances, but Monarchos was offering well above the return I thought was fair, as was Fifty Stars. My lack of regard or appreciation for Invisible Ink, the eventual runner-up, cost me all my multi-horse bets on the race, but win bets on Monarchos and Fifty Stars saved the day.

Thirteen days later at Pimlico, an uninspiring five-filly Black-Eyed Susan Stakes caught my interest because there were only two legitimate contenders and I thought one of them might be severely overbet. Two Item Limit had the superior speed figures and experience to be a worthy odds-on favorite, but I thought there was a scenario under which Tap Dance, the second choice, might end up very loose on the lead. While Two Item Limit was the better filly, she might lag too far back off slow fractions and fall short at the end.

I made Two Item Limit 60% to win the race, giving a 35% chance to Tap Dance and the remaining 5% to their three overmatched opponents. Odds of 2-1 or better on Tap Dance would make her playable. Unfortunately, everyone else seemed to have had the same idea about Tap Dance waltzing to the lead. With five minutes to post, both fillies were even money, and I felt neither remorse nor disloyalty as I went to the window to make the only logical bet: Two Item Limit to win, which she did at $4.40. Betting 6-5 shots to win is not my usual style, but I saw no other way to play the race and was convinced I was receiving outstanding value.

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When I first began playing the races, I probably would have bet on both Dollar Bill and Tap Dance instead of Monarchos and Two Item Limit, out of loyalty to my initial selections and the sense that you "should" bet on the horses you initially like.

The success of these two plays, though, was ultimately based upon the probability of victory I had assigned to each winner. I cannot argue in good conscience that Two Item Limit had precisely a 60% chance of victory as opposed to 57 or 63%, and I doubt that such calibration is in fact achievable. It is, however, possible through experience to get close enough that if you demand sufficient value to cover the margin of error, you should outperform the competition – your fellow horseplayers.

**The Competition**

One of the great romantic myths of racing is that the players are a merry band of brothers united in their quest to smoke out the winner of each race. This is the case at the blackjack table, where everyone is playing against the house and all the players win when the dealer busts out. At the racetrack, however, every bettor is playing only against the other bettors. The house takes its cut off the top and has no financial interest in how the remaining money is carved up.

If every horseplayer but you were a certifiable idiot, betting at random on names and colors, you would win every day. Conversely, if the only people betting into the pool were the small number of professionals who make a living this way, your chances for long-term victory would be slim.

Either way, what would make you a loser or a winner would not be a change in the number of winners you bet, but solely the odds that these horses would return. To put this another way: Your opportunity for profit at the racetrack consists entirely of mistakes that your competition makes in assessing each horse's probability of winning. In that first happy scenario, where the escaped lunatics are betting at random, you would win because you would bet on high-probability horses at fat odds. Every horse in a seven-horse field would be 5-1 (after takeout) and you would just bet on those with a better than 20% chance of winning. Playing purely against the pros, every horse would be bet in accordance with his true chances, and takeout would reduce each return below an acceptable price. You would be taking the worst of it every time.

Reality combines these two situations, since both nitwits and sharpies populate the betting pools every day. Has the balance shifted? There has been much carping in recent years that the game has become much tougher, or even "too tough." The game almost surely was easier 50 years ago when takeout was lower and track attendance was much higher, due primarily to racing's near-monopoly on legalized gambling. Unfortunately, the hordes of fabled two-dollar bettors of that era have mostly been seduced away by the jackpots of state lotteries and slot machines, and the industry has raised takeout to compensate for lost business.

Does that mean today's player faces nothing but higher vigorish and the remaining sharpies? Not at all. I firmly believe that, in general, the nitwits still outnumber the sharpies. More important, most sharpies aren't as sharp as they think, and even the winning sharpies make plenty of egregious mistakes on individual races. As long as the volume of ill-informed money exceeds the takeout, there can be a positive expectation for the true sharpshooter who waits for the competition to make mistakes.

How do we identify, and thus attack, this ill-informed money? There is no such thing as a bet that cannot possibly win, since every horse has a theoretical, if infinitesimal, chance of winning any race, if only because every single opponent theoretically could fall down. What defines sucker money is not the horse selected, but the acceptance of odds on that horse that are substantially out of line with its chances of winning.

For an example, let's return to the 2001 Kentucky Derby. Balto Star to win is not necessarily a bad proposition. However, Balto Star at 8-1 is a horrendous proposition. A one-dimensional front-runner does win the Derby about once every eight or 10 years, but never when there is a glut of other high-quality speed in the race. So perhaps Balto Star is a legitimate 8-1 shot in a vacuum. For Balto Star to have won this Derby, however, Songandaprayer and Keats both would have had to take back off the lead. Even if you thought there was a 50% chance that each of them would be taken back, that makes it only 25% that both would, so you have to apply

that against Balto Star's 8-1 in a vacuum and now he's more like 32-1. My assigning him a 4% chance of victory may have been overly generous.

At 8-1, however, Balto Star was eating up over 10% of the win pool, better than half the takeout. Eliminating him alone still left you better than 95% likely to win while cutting the takeout to 6%. Tossing others with even more microscopic scenarios for victory – Songandaprayer, Keats, Talk Is Money – would have allowed you to have a positive expectation on the race.

There are races run every day in which a similar strategy can be employed. Knowing that a single 5-1 shot in fact has a true chance closer to 50-1 wipes out the entire takeout on a race. An intense dislike of a 3-1 shot can be an extremely powerful tool and the entire motivation for playing a particular race.

There are also plenty of races in which your competition will make no actionable mistakes. Everyone seems to be at about the right price, and there is no compelling reason to jump into the pool. It is worth remembering that the whole is better than the sum of its parts: The betting public's post-time favorite wins more often than any individual public handicapper, and over time first choices win more than second choices, which win more than third choices, and so on down the line. ==There is no shame in passing a race because you just don't see any value in it==. Nor should you force yourself to play a race in which you have no confidence in your own odds line. That doesn't mean you have to sit on your hands – $1 boxes for action were made to fill the spaces between races where you have a legitimate edge or opinion.

Players who have never undertaken a value-based approach to handicapping will almost surely find it useful to begin making their own true-odds lines. It is cumbersome at first, but over time it becomes second nature, to the point where it can be done in your head and becomes the way you instinctively approach every race. However you choose to handicap horses is work that you do before the betting opens. As soon as those first prices go up on the board, you are looking for discrepancies between your odds and those set by your opponents.

Of course, it's tempting to anticipate those discrepancies by comparing your personal line with the early ones published in Daily Racing Form, which are made by either a DRF handicapper or the track's morning-linemaker. No mortal can resist a peek, but these early lines are widely misunderstood and misused – yet another opportunity for you to take an advantage.

A Daily Racing Form line is made 48 hours before a race. (A Saturday DRF is printed Thursday night so that you can buy it Friday and do your homework the night before the races.) It is a sincere effort to predict how the race will be bet, but because of the required printing window, it cannot incorporate early or late scratches, jockey changes, and prevailing track or weather conditions.

A track's morning line has even more pitfalls. It is typically prepared by a track employee in the racing office or simulcasting department whose primary skill in life may not be oddsmaking and whose agenda is different from yours. Tracks want to advertise their races as being competitive rather than mismatches, which is why horses we all know are going to be 3-5 are routinely listed at 6-5 on the morning line. Similarly, nearly every race card features several horses who are legitimately 99-1, but few morning-line prices exceed 30-1. Racing offices do not want to offend the horsemen filling their cards by saying their horses have virtually no chance.

Given all that, it is astounding how many horseplayers believe there is some magical significance to the morning line and to any discrepancies between it and the actual betting. If a horse is 4-1 on the morning line and 2-1 in the actual betting, plenty of your competitors will decide that this horse is a "good thing," the focus of an international betting coup orchestrated by the mysterious "they" who "know." If the same horse is instead 8-1 as post time approaches, the same conspiracy theorists will pronounce the horse "dead on the board." In fact, in either case, all that has happened is that the linemaker, an overworked and fallible human being like the rest of us, made a bad guess about how much the public would fancy a particular horse.

It is this sort of flawed thinking among your parimutuel opponents that creates incorrect prices on the board and thus opportunities for you. If some horses in a race are being overbet, that means that the prices are too high on the other horses and this is where you should be looking.

Is your competition offering you enough value to make this a profitable undertaking? Without discussing or judging anyone's method of handicapping, the answer is surely yes. There are enough people betting virtually at random, not even consulting complete past performances, to cover the takeout. Even among your well-informed opponents, the vast majority are betting with little consideration for the mathematics of value, which means that at least half the time they are betting on underlays and thus jacking up the prices on the overlays.



*Yes, how everyone else is betting, matters.*

It's not an easy game, but you're not playing against "the game." You're betting against the other bettors. It doesn't matter if they pick as many winners as you do, or even more, if you are betting only when the price is right.

**Using Multiple Bets to Improve Your Prices**

Despite facing higher takeout and fewer casual opponents, the 21st-century horseplayer has a tremendous opportunity that his counterpart of 50 years ago did not enjoy: The ability to bet a race in a dizzying array of options beyond win, place, and show. Nearly every race in America now offers both multi-horse bets – the exacta, trifecta, and superfecta – and also is part of at least one multi-race bet – a daily double, pick three, four, or six.

For the purposes of this discussion of value betting, we will not attempt to examine the mechanics and optimal strategies for each of these wagers, an exercise that would require an entire volume. Instead, the question is how multiple wagers can give the value-oriented horseplayer an additional opportunity for profit.

Many old-timers and other curmudgeons dismiss all multiple bets as some newfangled work of the devil and begin and end their argument by pointing to the higher takeout on these wagers. A typical takeout structure is New York's, where one-horse (win, place, and show) bets are subject to a 15% takeout, two-horse bets (daily doubles and exactas) face a 20% bite, and all wagers involving three or more horses or races are hit with a 25% takeout. No matter how you slice it, say the defenders of straight betting, over time you will do better playing against a 15% takeout than a 20 or 25% takeout. Isn't that a fundamental of value betting? Isn't choosing to play into a 25 instead of a 15% takeout the equivalent of getting $7.50 on a horse who should pay $8.50?

There are two good answers to this cranky argument. The first and most important is that a higher takeout is meaningless if the greater opportunity for profit exceeds the difference in the toll. Would you rather make a pre-takeout 35% profit and give back 25% for a 10% profit, or make 16% and give back 15?

The second answer is that multi-race bets allow a player to spread the effect of takeout over several races, so that he is actually facing a smaller bite per race than if he played them separately. Consider the difference between making win bets on three consecutive races and playing a pick three. In the first case, you are taxed 15% three consecutive times so your original dollar is sliced first to 85 cents, then to 72 cents, and finally to 61 cents. Playing those same three races via the pick three devalues your dollar just once, to 75 cents.

Wrapping your mind around this idea leads to an appreciation of the value opportunity in multiple betting. If you are playing a second or third race or horse at a reduced takeout, you are getting better odds on that additional race or horse than you normally could. This is why, over time, multi-race payoffs are higher than an equivalent parlay of the individual winners would be.
Let's look at the simplest version of how this works, a daily double. Suppose that in each of the two races, there is a horse paying exactly 2-1 who you think is actually 50% likely to win. If you parlay the two horses with $100 win bets, your $100 turns into $300 after the first race, and $900 after the second horse wins.

Not bad – an $800 return, and 8-1 on a proposition you believed was 3-1 (50% times 50%).

But what will the daily double of these two horses pay? At a 15% takeout, each 2-1 horse has 28.3% of the win pool on him, meaning he will pay $6 to win. Assuming that these horses are bet the same way in the double pool, that means 28.3% of all tickets have the first winner, but out of those tickets, only 28.3% combine him

with the second winner. Multiply those two probabilities, and it means that only 8% of the daily-double pool is bet on the winning combination.

At a 20% takeout, a double that accounts for 8% of the pool returns $20, and your $100 double gets you $1,000 instead of the $900 you would get for parlaying the same two horses – despite betting into a pool with a higher takeout. In effect, you are getting a $20 mutuel instead of an $18 mutuel.

This may not seem like a thrilling difference, but a 10% increase in payoff is enough to make many a chronic loser into a chronic winner. Moreover, the difference increases in pick threes and fours as you add more races, and can often be far more than 10%. Add a third 2-1 winner to the example above and the $18 parlay becomes a $54 three-horse parlay. The $20 double, however, even with a 25% takeout, becomes a $66 pick three.

What is happening here is the powerful, hidden effect of reducing takeout and thus getting "free" odds on additional horses or races. Now take this to the next logical step: If you are getting inflated odds on one part of the bet, you can now tolerate getting only even odds, or even slightly unfavorable odds, on the other. This can make an otherwise unplayable race or races attractive.

An obvious example of this is the race with a heavy favorite you can neither bet nor beat. Let's say you think a 9-10 favorite in a four-horse field has a 50% chance of winning. He is actually being slightly underbet by the public, because if 50% of the pool were on him, he would pay $3.40, not $3.80. So there is a "mistake" being made by the public – a horse with a 50% chance of winning is attracting only 44% of the pool – but it is a mistake you cannot capitalize upon because the takeout eats up your edge.

However, by using this horse in the first leg of a multi-race bet or the top half of an exacta, you can realize the value of the gap. Only 44% of the exacta tickets will have this horse on top, and only 44% of the doubles or pick threes will have this horse winning the first leg.

Let's use the same race to see how a multiple pool can present a value opportunity that otherwise would not exist. Suppose that of our favorite's three opponents, you think two of them are inseparable but the third is badly overmatched. The public, however, gives the horse you despise nearly the same chance as the other two. Here is how the win pool and odds on the race might look:

| Horse | Probability | Req. Odds | Actual Odds |
|-------|-------------|-----------|-------------|
| A | 50% | 1-1 | 4-5 (44% of pool) |
| B | 22% | 7-2 | 3-1 (19% of pool) |
| C | 22% | 7-2 | 3-1 (19% of pool) |
| D | 6% | 16-1 | 7-2 (18% of pool) |

Every single win bet in the race is unplayable because all the odds are below your acceptable price for value. Thirty years ago, you would have been obliged to pass the race or make a bad bet. But in the world of the multiple, what about making two exactas, A-B and A-C? If your assessment of their chances is correct, what are your chances of collecting and what will your return be?

To understand the mathematics of exacta odds, it is helpful to think of an exacta as if it were a daily double. The first race is the four-horse race that includes the favorite you are using on top. The second race is a three-horse race for second. Since you believe Horse A has a 50% chance of winning, you are 50% to "win the first race." Since horses B and C account for 44 of the remaining 50%, together they are 88% to win the "second race" for second place. So if your probabilities are correct, you are now 44% (50% x 88%) to have an A-B or A-C exacta come in. What should these exactas pay?

Here is where you take advantage of the otherwise unexploitable differences between your assessment of probability and the actual betting. Horse A is on top of only 44% of the exactas, not 50%. Eliminate him from the race for second and increase the other horses' %ages of the pool to add up to 100. If they were 19, 19, and 18% of the original remaining 56%, those numbers now increase to 34, 34 and 32%. Here's your second edge: While you think B and C have a combined 88% chance of running second to A, the pool has them at only 68%.

So the A-B and A-C exactas account for only 44% x 34% of the pool, roughly 15%. At a 20% takeout, the A-B and A-C exacta would each return $10.60.

If you bet $4 to win on Horse A and he wins 50% of the time, you collect $3.80 for every $4 you bet. If you bet the A-B and A-C exactas, you win only 44% of the time but when you do, you collect $10.60.  This translates, over 100 plays, to a $20 loss on the win bet and a $66 profit on the exacta, a 5% loss as opposed to a 16.5% profit. What made the difference? Only your unspectacular assessment that the longest shot in the field had a 12% rather than 32% chance of finishing second.

An important side note: This example made an assumption, for simplicity's sake, that horseplayers should not routinely make about exactas. We took it as a given here that horses B, C, and D had the same comparative chance to finish second to Horse A as they did to win the race. There is a fruitful line of thought that this is often not the case, for reasons of pace or consistency. An erratic front-runner who can win when he breaks well and sets a moderate pace may have a 20% chance of winning but a much smaller chance of ever finishing second, since he stops badly when challenged early. Conversely, a chronic early lagger may clunk up for second far more often than he ever wins.


*The sucker is wearing a hat...*

These kinds of horses present additional opportunities because they are rarely bet proportionately to these different likelihoods in the exacta and trifecta pools. So many players insist on wasting their money with lazy betting techniques such as wheels and boxes that they overuse these horses in the wrong positions. A horse who is only 5% to win a race but perhaps 15% to run second is a terrible win bet at 10-1 but a great horse to use underneath in exactas if he is being bet there at the same rate.

Several of the examples in this chapter were chosen or constructed for their relative simplicity in illustrating a concept rather than for their real-world popularity. There are not many recreational horseplayers who find it sufficiently challenging or rewarding to turn $4 into $10.60 44% of the time. (Perhaps more of them should, if only to finance their sexier parimutuel undertakings.)

The same principles of value betting, however, apply regardless of the complexity or size of mutuels you are chasing. To summarize:

- Recognize the difference between picking horses and making wagers in which you have an edge. ==The only path to consistent profit is to exploit the discrepancy between the true likelihood of an outcome and the odds being offered.==

- ==You are playing against only the other bettors at the track, not against the game or the house. Although they do a pretty good job on the whole, your opponents make more than enough mistakes for you to win.==

- Multiple bets can make apparently valueless races highly playable, and can multiply the existing value in a race because of the opportunity to capitalize on more than one discrepancy on the board.

If all of this seems too calculating and joyless, by all means feel free to forget about it and enjoy yourself at the races betting horses you fancy regardless of their price. You'll have plenty of company, and the rest of us could use your money.

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[i] *Bet with the Best: Expert Strategies from America's Leading Handicappers.  Beyer, Brohamer, Crist, Davidowitz, Litfin, Quinn, Shuback, Stich, & Watchmaker. DRF Press.  September 2001.*